

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No.: 10/036,802 : Confirmation No.: 5368
Applicant: Toshiaki Fujii et al. : Group Art Unit: 3652
Filed: December 21, 2001 : Examiner: Keenan, James W.
Docket No.: TOK-98-2018-C :

For: CONTAINER AND LOADER FOR SUBSTRATE

February 12, 2007

VIA EFS
Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed concurrently with a Notice of Appeal. This review is requested for the reason(s) stated on the attached sheet(s), which do not exceed more than five (5) pages.

Reasons begin on page 2 of this paper.

REASONS

I. Background.

First, Applicants respectfully note that they have made diligent efforts to expedite prosecution, and have also cooperated with the highest level of decorum and courtesy. Accordingly, this appeal is not frivolous and is respectfully asserted to be warranted by errors in the rejections of record including clear technical errors in the Examiner's interpretation of "mini-environment," which has already been respectfully pointed out in rigorous fashion by Applicants using supplemental materials and clear discussion. Also, the Examiner impermissibly relies on unsupported personal knowledge.

On October 12, 2006, the USPTO issued a Final Office Action. In response to the Final Office Action, Applicants respectfully filed a response on January 12, 2007. In this response, Applicants argued a number of points that did not require amendments to the claims, namely, that the cited references failed to disclose one of the claimed limitations and that the rejections relied on the Examiner's unsupported personal knowledge to teach a specifically claimed limitation (see Sections IV.A-IV.B on pages 9-13 of Amendment dated January 12, 2007). For the sake of clarity, Applicants respectfully acknowledge that a third argument was made (i.e. Section IV.C on page 14) that relied upon amendments made after Final Rejection. Because these amendments were have not been entered for appeal, this Request for Review does not relate to this argument section. Rather, for the purposes of this Request for Review, Applicants respectfully focus on the arguments that do not rely on after-Final amendments.

In reply to these arguments, the USPTO respectfully issued an Advisory Action on January 29, 2007. However, instead of responding to the specific technical and legal issues raised by the Applicants, the Advisory Action of January 29, 2007 merely relied on "the reasons set forth in the previous Office action" to maintain the rejections.

In summary, Applicants respectfully assert that the reasons set forth in the Final Office Action of October 12, 2006 were technically and legally in error, and these errors have been pointed out but never responded to by the Examiner. Thus the claims should respectfully be allowed over the cited references.

II. Discussion of errors in the Final Office Action.

Claims 9, 24, 29, and 32 are the remaining pending independent claims. As noted on page 3 of the Final Office Action, these claims are rejected under 35 U.S.C. § 103(a) as obvious over Muka (US 5,613,821), in view of Briner (US 5,810,537) in view of Mastroianni (US 6,068,668). Regarding this rejection, Applicants respectfully note *two clear errors in the USPTO's reasoning*: first, the cited references do not disclose a specifically claimed limitation, and second, the USPTO impermissibly relies on the Examiner's own personal knowledge without citing a reference or taking "Official Notice."

A. The cited references do not teach or suggest the specifically claimed unifying means for unifying the cover of the container and the door in the low cleanliness room of claims 9, 24, 29, and 32.

For the issue under consideration, claim 9 claims in relevant part:

"a unifying means for unifying the cover of the container and the door in the low cleanliness room;" (emphasis added)

and claims 24, 29, and 32 claim similar limitations, as explained on page 15 of the Amendment dated January 12, 2007.

Throughout the examination of this Application, the Examiner has respectfully persisted in insisting that "mini-environment 58" of Muka teaches the claimed structure quoted above (for example, see page 3 of the Final Office Action). However, this reasoning is respectfully a clear technical error in interpreting the Muka reference.

Specifically, as noted in previous responses filed by Applicants, it is respectfully asserted that *mini-environment 58 in Muka is not a low cleanliness room*. Instead, as noted in column 5, lines 51-54 of Muka, mini-environment 58 "sealingly isolat[es] the load lock 22 and the interior 40 of the carrier 32 from the surrounding atmosphere" (emphasis added). Furthermore, **both carrier 32 and load lock 22 are "substantially particle free environments"** (see column 5, lines 19-21 and column 6, lines 22-24 of Muka). Additionally, column 5, line 15 of Muka states: "within the **clean** mini-environment" (emphasis added). *Thus, it is clear that the USPTO is technically incorrect when it states on page 7 of the Office Action that "the mini-environment is exposed to the surrounding atmosphere, and thus is in the low-cleanliness room," because the mini-environment is a "clean mini-environment" by definition.* In fact, as previously explained in an Amendment dated August 1, 2006, "mini-environment" is a well known term of art meaning a clean and contaminant-controlled wafer transfer area.

As further noted in column 6, line 62 through column 7, line 18 of Muka, load lock door 80 and carrier door 42 must both be opened during the transfer of wafers through mini-environment 58 into load lock 22, as is clearly illustrated in Figure 8 of Muka. Additionally, Muka explicitly states in column 8, lines 33-37 that:

“It will be appreciated that operation of the multilevel end effector 84 cannot be achieved until the drive mechanism 118 has been operated to move the load lock door, the coupling device 98, and the carrier door 42 all to the lowered position as indicated in FIG. 8.”

Therefore, it is respectfully clear that mini-environment 58 is exposed to both carrier 32 and load lock 22 during the operation of the device in Muka. Thus, because mini-environment 58 is exposed to both carrier 32 and load lock 22, it is respectfully reiterated that mini-environment 58 cannot be a low cleanliness room. If, as the USPTO respectfully suggests, mini-environment 58 is a low cleanliness room, then the “substantially particle free environment” of carrier 32 and load lock 22 would be destroyed. Therefore, in order for the device in Muka to serve its intended purpose, mini-environment 58 must inherently be a high cleanliness room.

Therefore, the USPTO has made a clear and appealable technical error.

Thus, the USPTO’s proposed interpretation of mini-environment 58 as a low cleanliness room would render the device in Muka unsatisfactory for its intended purpose because carrier 32 and load lock 22 would no longer be “substantially particle free environments” after the transfer of the wafers. Additionally, it is respectfully clear that any modification of Muka to replace mini-environment with a low-cleanliness room would likewise render the device in Muka unsatisfactory for its intended purpose (see MPEP 2143.01 V). Therefore, the USPTO is technically incorrect in alleging that mini-environment 58 is a low-cleanliness room.

Additionally, it is respectfully asserted that the Briner and Mastroianni references do not overcome this deficiency in the primary reference, Muka.

Thus, it is respectfully asserted that the cited references, taken either alone or in combination, do not teach or suggest a unifying means for unifying the cover of the container and the door in the low cleanliness room, as claimed in claim 9. Therefore, it is respectfully asserted that claim 9 is not obvious over the cited references.

B. The USPTO impermissibly relies on the Examiner's unsupported personal knowledge to teach or suggest a specifically claimed limitation.

On pages 11- 13 of the Amendment dated January 12, 2007, Applicants explain in detail how the USPTO relies on the Examiner's unsupported personal knowledge. In brief summary, the Examiner insists that mini-environment 58 of Muka is a low-cleanliness room. However, there is respectfully no indication in Muka that mini-environment 58 is a low-cleanliness room. To the contrary, there are several passages in Muka that clearly indicate mini-environment 58 is actually a high cleanliness room. Thus, it is respectfully asserted that the Examiner is contradicting the teachings of Muka to draw unsupported conclusions.

Therefore, Applicants seasonably challenged this impermissible reliance on personal knowledge and required that a reference be cited, as explained at MPEP 2144.03 (see page 13 of Amendment date January 12, 2007). However, the USPTO failed to respond by citing a reference, and thus it is respectfully asserted that the obviousness rejections were properly overcome.

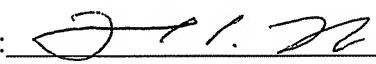
III. Conclusion.

For the above reasons, Applicants respectfully assert that all pending claims are allowable, and the reasons for rejection in the Final Office Action were clearly erroneous.

The Commissioner is hereby authorized to charge any additional fees that may be required for this submission, or credit any overpayment, to Deposit Account No. 06-1130.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,
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